Diverse expert pool studying issues

The Coordinating Council has a wealth of scientific expertise to call on when technical issues arise that require in-depth professional debate. These experts represent a unique blend of scientists from academia, government research facilities and private consulting firms who sit down once a month to hash out pressing technical issues relating to the site. At the conclusion of their sessions, they report back to the Coordinating Council on their findings, recommendations and issues of debate.

The following highlights the careers and specialties of some of the experts studying the site:

•**Bill Bress** has served as the state toxicologist for the Vermont Department of Health since 1985. Certifiifed by the American Board of Forensic Toxicology, he has worked in the field in various capacities for more than 20 years. Prior jobs include forensic toxicology work for private industry and law enforcement agencies in New York.

•**Anne Marie Burke**, a toxicologist,has served as the EPA's risk assessment coordinator for Superfund sites throughout New England since 1990. Prior to joining the EPA, she worked as a toxicologist for the Massachusetts Department of Public Health, where she developed public health consumption advisories for the statewide fish sampling program.

•**Dr. David Burmaster** works for the Alceon Corporation in Cambridge and holds degrees in biophysics and engineering. He specializes in human health and ecological risk assessments, as well as toxicology and exposure models.

•**Ken Carr** has worked as a biologist for the U.S. Fish and Wildlife Service for the past 20 years. He specializes in areas concerning wildlife damage control, wetland evaluation and protection, contaminants research in fish and wildlife in New England, and administration of natural resource trustee issues for hazardous materials and oil spills.

•**Dr. Nancy Hayden** is an assistant professor of environmental engineering at the University of Vermont. She brings to bear a working familiarity with how to deal with hazardous waste management. She has previous experience assessing groundwater and air quality issues at the Pine Street Site. Her expertise in remediation, environmental engineering and air quality will be particularly useful in addressing issues of public concern and in developing a solution that is publicly and environmentally acceptable.

•**Dr. Leslie King** is an associate professor of environmental studies and natural resources planning at the University of Vermont. She is a resource economist whose background includes dealing with hazardous waste managment issues. Her expertise in land use policy and strong interest in citizen involvement in decision-making will be helpful in resolving site issues.

•**Dr. Alan McIntosh** is an ecotoxicologist and director of the University of Vermont's Water Resources and Lake Studies Center. He has extensive experience addressing problems with hazardous waste and is currently heading a major toxic substance project on Lake Champlain.

•**Seth Pitkin** has worked for the Johnson Company for the past eight years as a hydrogeologist. He specializes in the transport of subsurface contamination in groundwater.

•**Alan Quackenbush** heads the aquatic toxicity testing program for the State of Vermont. He has been with the Vermont Department of Environmental Conservation since 1989 working in the state's lakes and ponds program, and also spending time studying the effects of acid rain on Vermont lakes and streams.

•**Mike Smith** joined the Vermont Department of Environmental Conservation in the mid-'80s after working as a geological and environmental consultant for several years. He currently works as a hydrogeologist in the state's hazardous materials management branch.

•**Susan Svirsky** has worked for the EPA since 1985 as the ecological risk assessor in the New England area. Prior to joining EPA New England, she worked for several years at EPA Headquarters studying water pollution issues, and also spent time working for the State of Maine in its inland fisheries and wildlife department.

•**Dr. John Teal** specializes in wetland ecology and petrochemical pollution. He splits his time between working at the Ecological Engineering Associates and the Woods Hole Oceanographic Institution.

Upcoming Meetings

In addition to the meeting listed on page one, the council has set forth a meeting schedule for the remainder of the year. All council meetings are open to the public and run anywhere from two to three hours.

The results of the technical work group meetings held during the day are summarized at each evening Coordinating Council meeting. For a listing of the scheduled work group meetings (which are also open to the public) and locations, please contact the facilitator or any Council member.

November 3
5:30 p.m.

Discussion of Statement of Work for Second Phase Studies
Burlington Electric Department,
585 Pine Street, Burlington

November 15
7-9 p.m.

Public Informational Meeting to Discuss Progress of the Council
Contois Auditorium,
Burlington City Hall

December 8
5:30 p.m.

Discussion of Statement of Work for Second Phase Studies
Burlington Electric Department

Input solicited on outreach efforts

Council members have sent out letters, surveyed meeting attendees, held informational meetings, and made presentations on current issues in an effort to meaningfully involve the community in developing a new cleanup plan for the site.

If you would like to have a presentation made to your group or if you have suggestions for ways we can keep you abreast of our progress, please contact a Council member (see page 1 of this *Progress Update* for names and phone numbers).

Champlain Parkway plans continue moving forward as Council works on site studies

The City of Burlington, State of Vermont, and the EPA have been working behind the scenes to discuss details necessary to reactivate the Champlain Parkway project (formerly known as the Southern Connector project). Although the project is still in its beginning stages, these initial steps have renewed confidence that the road will be built, at least in part, within the next several years.

The road will be built in two parts. The first part, referred to as "Contract 2," consists of a four-lane divided highway from Home Avenue to Lakeside Avenue. This section of roadway is already designed and rights-of-way have been obtained. Once the design has been reviewed, it can be put out to bid, provided that all approvals for both Contracts 2 and 6 have been obtained.

The second part, known as "Contract 6," consists of a "detour" along Pine Street and a connecting spur between Pine and Battery streets.

Originally, the roadway was to continue from Lakeside Avenue through roughly the middle of the Pine Street Barge Canal Site. Uncertainties about the extent of contamination and the remediation plan for the site, however, have resulted in a decision by both the City and the State to use Pine Street as an alternate route. There is a possibility that when contamination issues at the Superfund site have been resolved, the State and City might reconsider the use of a section of the site (not in the original alignment) for the final location of the roadway.

This spring, use of Pine Street as an alternate route received preliminary approval on traffic numbers from the District 4 Environmental Commission. This approval is the first step toward obtaining final consideration of this alternate route by the environmental commission, which will be scheduled when the City and the State submit complete design drawings for the entire project.

A more complicated portion of Contract 6 consists of a spur through property now owned by the City of Burlington, Vermont Railway and T.A. Haigh, linking Pine Street to Battery Street. This phase is more complicated because it requires the procurement of rights-of-way from the existing property owners. It is hoped that during the construction of Contract 2, the necessary rights-of-way and approvals will be obtained for the spur portion of Contract 6. If this is feasible, construction work could commence on Contract 6 immediately after Contract 2 is completed.

Although there is a lot of work that needs to be done before shovel is put to the ground, the State and the City are committed to doing everything possible to get the job done.

Mailing list questions?

- The Coordinating Council maintains two mailing lists. People on the "Pine Street Mailing List" receive copies of periodic *Progress Updates*, and relevant media releases - enough information to keep most people current with the issues. Those who would like additional information can be added to the "Coordinating Council Mailing List" and receive all the Council's meeting summaries. (If you received this Progress Update in the mail, you are already on one of the mailing lists. Please check your address label: a "CC" indicates that you are on the Coordinating Council Mailing List; otherwise you are on the Pine Street Mailing List.)

☐ I would like my name placed on the Pine Street Mailing List

☐ I would like my name placed on the Coordinating Council Mailing List

Please check the box of the mailing list you would like to be on and mail this form to:

Pine Street Barge Canal Coordinating Council
PO Box 4632
Burlington, VT 05406-4632

NAME _____

ADDRESS _____

CITY, STATE, ZIP CODE _____

Pine Street Barge Canal Coordinating Council
PO Box 4632
Burlington, VT 05406-4632

Mailing Labels go here

Pine Street Barge Canal Coordinating Council

Progress Update #3
May 1998

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Lake Champlain Committee
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The Pine Street Coordinating Council represents a first-of-its-kind effort that includes a diverse cross section of local citizens, environmental groups, the potentially responsible parties and local state and federal representatives working together to reach consensus on a cleanup remedy. If the Coordinating Council approach is successful in Burlington, the process may duplicated at other sites around the country.

Council reaches Consensus on Cleanup at the Barge Canal... Environmental Projects Proposed

This Progress Update is the third report the Coordinating Council has provided to keep interested citizens informed about activities at the Pine Street Superfund Site.

In September 1997, the Pine Street Barge Canal Coordinating Council reached consensus on a remedy for the Pine Street Superfund site that will address risks posed by contamination at the site.

In addition, to satisfy the concerns of certain council members, if the proposed remedy is adopted, Potentially Responsible Parties have agreed to voluntarily contribute to additional projects that will benefit the greater Burlington area.

Site Remedy

1) Placement of a sand/silt cap on the contaminated canal and wetland sediments. The cap would isolate contamination from canal aquatic life. This would be done under water and with minimal disturbance to contaminated sediments. Underwater capping has been used at other Superfund sites with success.

2) Institutional controls for the most contaminated parts of the site. The proposed controls would prohibit residential use, specify construction techniques for major excavations greater than five feet, establish procedures for utility workers, and prevent land uses that cause recontamination of the site.

See Remedy, page 5

Public Meeting Scheduled

The Pine Street Barge Canal Coordinating Council will host a public meeting on June 4, 1998 at 7:00 pm at the Contois Auditorium in Burlington City Hall to discuss the Proposed Cleanup Plan and to field any questions from the audience. Community attendance is strongly encouraged.

For more information, contact one of the council members listed on the left.

Cleanup Objectives

- **Prevent exposure to contaminated soils and sediments which pose a risk.**
- **Restore wetlands that are affected by the cleanup activities.**
- **Restrict the use of contaminated groundwater.**
- **Protect Lake Champlain**
- **Prevent Re-contamination**
- **To the extent practicable, ensure the remedy does not interfere with the current and future land uses.**

1.

Results are in...Studies are Complete

The Pine Street Barge Canal Coordinating Council has completed evaluating the results of additional studies conducted in 1995 and 1996. The findings are presented in a series of reports most of which are available to the public. A list of these reports can be found on page 6.

When convened in 1993, the Coordinating Council developed a list of questions of questions based on the public's concerns which needed to be answered prior to choosing a cleanup plan for the Pine Street Superfund Site.

These questions were presented in Progress Update #2. A diverse group of technical experts was assembled to review all existing data. Some of the questions were answered after the technical experts discussed the data and reached scientific positions of agreement.

For the unresolved questions, the technical experts designed the additional studies needed to collect the necessary data. The Potentially Responsible Parties and their contractors then conducted field work, analyzed samples and evaluated data.

The Coordinating Council also developed objectives for an acceptable remedy. The Feasibility Study which evaluates the cleanup alternatives along with the rest of the administrative record will be available at the site repositories beginning June 5.

The culmination of this work marks major progress at the Barge Canal site and a significant accomplishment for the Coordinating Council, as consensus has been reached regarding the nature and extent of contamination and the risks it poses.

On June 24, 1998, there will be an official hearing and a 30-day public comment period on the proposed cleanup plan. The last day to submit comments is July 8, 1998.

The following are answers to some of the more frequently asked questions:

1) *Is site contamination currently affecting Lake Champlain?*

No. There are three possible ways that site contamination could reach Lake Champlain: surface water flow, groundwater flow and movement of contaminated sediments. Because previous investigations have shown that the surface water in the canal is clean, this route was not studied again in 1994-1995.

Questions did remain about whether contaminated groundwater from the site could reach Lake Champlain and whether contaminated sediments from the canal could be carried to Lake Champlain during storms.

To resolve the first issue, the groundwater level was measured for one year; groundwater samples were collected between the canal and the Lake; and "worst case" calculations of contaminant transport were performed.

These studies showed that a groundwater divide sometimes exists between the canal and the Lake which would prevent flow to the Lake. When the divide is not present, groundwater is able to flow to the Lake. However, most of the groundwater samples collected between the canal and the Lake were not contaminated. One sample did contain the compound benzene at concentrations exceeding drinking water standards. The technical experts concluded, however, that the amount of contaminated groundwater that reaches the Lake is not high enough to cause risk to people or the ecosystem.

To resolve the second issue, suspended sediment was collected hourly at the mouth of the turning basin during major storms. The experts also agreed that significant amounts of sediment are unlikely to move from the canal and turning basin into the Lake.

2) *Is the air safe to breathe under current, undisturbed conditions?*

Yes. Four 24-hour ambient air samples were collected at the site on several hot dry days with little wind. These conditions represented a "worst case" scenario. The results of these tests indicated that the site does not impact the ambient air quality of the area.

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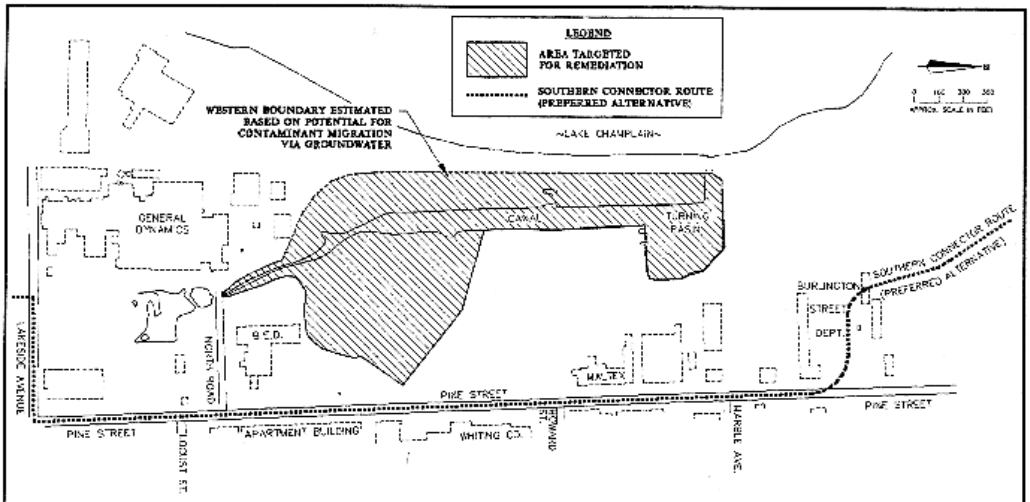

FIGURE 1: AREAS TARGETED FOR REMEDIATION IN 1992
(based on areas of unacceptable ecological risks and the extent of deep contamination given the potential for contaminant migration towards Lake Champlain in groundwater)

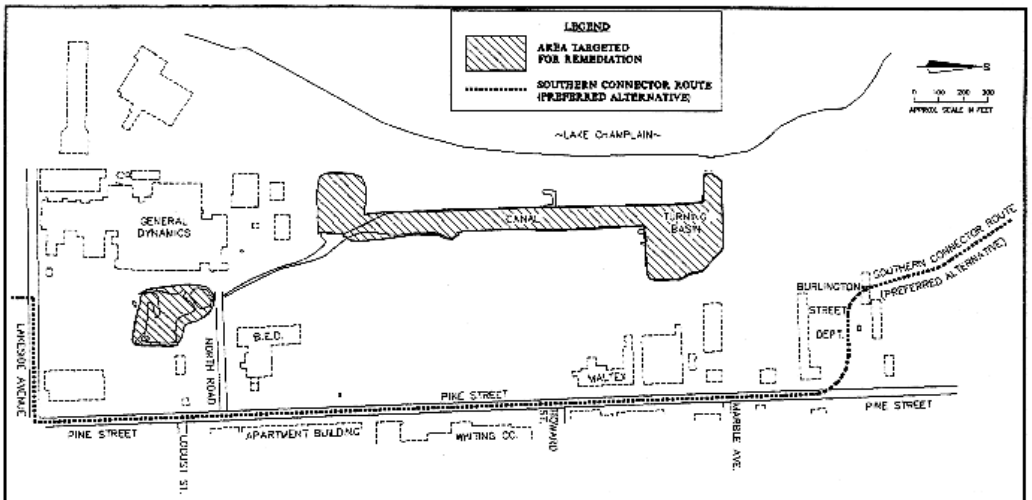

FIGURE 2: AREAS CURRENTLY BEING TARGETED FOR REMEDIATION
(based on areas of unacceptable ecological risks and the finding of no significant migration of contaminants)

PROGRESS UPDATE FIGURES PINE STREET CANAL SITE BURLINGTON, VERMONT	THE JOHNSON COMPANY, INC. *Environmental Sciences and Engineering* 100 STATE STREET MONTPELIER, VT 05602

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